BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e25580
doi: 10.3897/biss.2.25580

OPEN ACCESS

Conference Abstract

Involving Collection Staff in the DINA Software Development – An Agile Approach

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Received: 06 Apr 2018 | Published: 18 May 2018

Citation: Englund M, Heikkinen M, Sundström L (2018) Involving Collection Staff in the DINA Software Development – An Agile Approach. Biodiversity Information Science and Standards 2: e25580. https://doi.org/10.3897/biss.2.25580

Abstract

In order to ensure long-term commitment to the DINA project ("**DI**gital information system for **NA**tural history data", https://dina-project.net), it is essential to continuously deliver features of high value to the user community. This is also what agile software development methods try to achieve by emphasizing early delivery, rapid response to changes and close collaboration with users (see for example the Manifesto for Agile Software Development at http://agilemanifesto.org). We will give a brief overview on how current development of the DINA collection management system core is guided by agile principles. The mammal collection at the Swedish Museum of Natural History will be used as an example.

Developing a cross-disciplinary collection management system is a complex task that poses many challenges: Which features should we focus on? What kinds of data should the system ultimately support? How can the system be flexible but still easy to use? Since we cannot do everything at once, we work towards a *minimum viable product* (MVP) that contains just enough features at a time to bring value for selected target users. In the mammal collection case, the MVP is the simplest product that is able to replace the functions of the current system used for managing the collection. As we begin to work with other collections, new MVPs are defined and used to guide further development. Thus, the set of features available will increase with each MVP, benefiting both new and current users.

Another big challenge is migration of legacy data, which is labor intensive and involves standardizing data that are not compatible with the new system. To address these issues, we aim to build a flexible data model that allows less structured data to coexist with more complex, highly structured data. Migration should thus not require extensive data standardization, transformation and cleaning. The plan is to instead offer tools for transforming and cleaning the data after they have been imported. With the data in place, it will be easier for the user to provide feedback and suggest new features.

Keywords

collection management, agile, software development, minimum viable product

Presenting author

Markus Englund

Acknowledgements

Additional contributions:

Corrections and edits: Falko Glöckler & James Macklin

Developers: Anton Öberg, Fredrik Olovsson, Ingimar Erlingsson & Ida Li